

27th: S. S. "Batavia," between N. 42° 01', W. 49° 15' and N. 41° 47', W. 51° 03', passed several icebergs; s. s. "Caledonia," in N. 42° 38', W. 49° 01', passed numbers of icebergs; s. s. "Habsburg," from N. 42° 32', W. 48° 51' to N. 43° 24' W. 49° 23', passed twenty-three icebergs.

28th: S. S. "Rhyndland," in N. 41° 34', W. 48° 19', passed large iceberg; s. s. "Sidonia," in N. 51° 40', W. 50° 46', passed sixty icebergs, ranging from one hundred to one hundred and fifty feet high; s. s. "Surrey," in N. 42°, W. 50°, passed several icebergs and a quantity of loose ice.

29th: S. S. "Silesia," in N. 40° 03', W. 45° 37', passed an iceberg; brig. "Carita," from Saint Pierre for P. E. I. arrived at Halifax after being eleven days in the ice and found it impossible to reach her destination.

30th: S. S. "City of Paris," in N. 41° 50', W. 48° 14', passed several icebergs; s. s. "Mosel," from N. 42° 40', W. 49° 09' to N. 42° 39', W. 50° 76', passed several icebergs; s. s. "Silesia," in N. 43° 48', W. 53° 00', passed twelve large icebergs.

31st: S. S. "Britannic," in N. 43° 08', W. 46° 31', passed small iceberg; s. s. "City of Paris," in N. 41° 37', W. 50° 25', passed very large iceberg; s. s. "Kansas," from N. 42°, W. 48°, to W. 50°, passed several icebergs and some field-ice.

Captain S. E. Wright, of the s. s. "Carroll," reports, May thirty-first: "Icebound in Halifax harbor since twentieth; the ice has come along the Nova Scotia shore and in sight of the harbor; such was never before witnessed by the oldest inhabitants."

TEMPERATURE OF THE AIR.

The distribution of mean temperature over the United States for the month of May, 1882, is exhibited on chart ii. by the dotted isothermal lines. The table of mean comparative temperatures in the lower left-hand corner of the chart, shows the average temperature for the month in several districts as determined from observations taken at Signal Service stations during the month of May for previous years. The second column shows the mean temperature for the current month; the third column shows the departures of the mean of the current month from the mean of several years.

The temperature has been below the mean in all districts except in the north Pacific coast region (where it is about the normal), the greatest departures being as follows: 8°.2 in the upper Mississippi valley; 7°.4 on summit of Mount Washington; 7°.2 in the Missouri valley; 6°.6 in the Ohio valley; 6°.4 in the lower lake region; 5°.6 in New England, the upper lake region and middle slope; 5° in the extreme northwest and 4°.4 in the middle Atlantic states.

DEVIATIONS FROM MEAN TEMPERATURE.

Under this heading departures exhibited by the reports from the regular Signal Service stations are shown in the table of comparative temperatures on the left-hand side of chart ii. The following items of importance, in connection with the subject, are reported by voluntary observers:

Connecticut: Southington, mean temperature, 52°.3, or 5°.97 below the average of the past twelve years and lower than for any May during that period; the highest monthly mean, 62°.6, occurred in 1880.

Indiana: Riley, mean temperature 50°.9, or 6°.5 below the average of the past twenty-one years. Only May of 1867 was colder than that of the present year. Mean temperature of spring is 1° below the average spring mean.

Illinois: Vevay, mean temperature, 62°.4, or 3° below the average of past seventeen years. Maximum temperature, 85° is 5°.65 below the average maximum temperature, and minimum 35° is 9°.06 below the average minimum temperature of the past seventeen years.

Iowa: Clinton, mean temperature 53°.5 or 8° below the average.

Kansas: Lawrence, mean temperature 60°.27 or 6°.28 below the average of fourteen preceding years; maximum temper-

ature for month, 90°; minimum, 36°.5; the highest maximum during the past fourteen years, 95°, occurred in 1874, '75 and '80; lowest minimum, 30°, occurred in 1875. Wellington, mean temperature 58°.2 is 10°.2 below the average of the three preceding years.

Maine: Gardiner, mean temperature 49°.26 or 4°.30 below the average of the past forty-six years, and is lower than for any May during that period; the next lowest mean, 49°.42, occurred in 1837.

Maryland: Fallston, mean temperature 55°.39 or 6°.54 below the average of the eleven preceding years. During that period the highest monthly means, 63°.16, 63°.83 and 63°.90, occurred in 1871, '72 and '81, respectively; the lowest monthly mean, 58°.68, occurred in 1877, and is 3°.29 above that of May, 1882.

Missouri: Saint Louis, Missouri Weather Service reports: mean temperature about 60°, which is more than 6° below the average of the past forty-five years. The lowest monthly means since 1837 occurred as follows: 60°.5 in 1838; 61° in 1857, and 60° in 1867.

New Hampshire: Contoocookville, mean temperature 52°.5, which is the lowest May mean that has occurred during the past eleven years, and is 4° below the average of the same period.

New York: Palermo, mean temperature 49°.8 or 5°.1 below the average of past twenty-nine years. During that period the highest monthly mean, 60°.7, occurred in 1880; the lowest, 47°.5, occurred in 1867. Waterburg, mean temperature 50°.4, or 5°.4 below the average of past eleven years. During that period the highest monthly means, 62°.6 and 62°, occurred in 1880 and '81, respectively; the lowest, 53°.1, (with the exception of that of present year) occurred in 1873. North Volney, mean temperature 50°.2, or 5°.47 below the average of past fourteen years. During that period the highest mean, 62°.43, occurred in 1880; the lowest, 52°.37, (with the exception of that of the present year) occurred in 1869. Mean temperature of spring, 40°.34, is 1°.66 below the spring average of the past fourteen years. The lowest spring mean, 38°.35, occurred in 1875; the highest spring mean, 47°.48, occurred in 1878.

Pennsylvania: Wellsboro, month the coldest that has occurred during the past ten years. The mean temperature, 50°.5, is 15°.6 below that of May, 1881. During May, 1881, only one frost occurred while fourteen occurred during May, 1882. Dyberry, mean temperature, 48°.4 is more than 2° below the mean of the coldest May that has occurred during the past twenty years, and 15° below the mean of May, 1881.

Texas: Clarksville, mean temperature of the month lower than for any May during the past thirteen years.

Vermont: Woodstock, mean temperature 50.25 or 3°.77 below the average mean of May from 1868 to 1882 inclusive. During that period the highest monthly mean, 61°.17 occurred in 1880; lowest, 50°.09, occurred in 1873; maximum temperature, 96°.3, occurred May 26, 1880; minimum, 22°.4 occurred May, 7th, 1874.

Virginia: Wytheville, mean temperature, 57°.86 or 3°.9 below the average of past nineteen years. The highest monthly mean, 66° occurred in 1880; lowest, 50°, occurred in 1866. The highest temperature reached during the month, 83°, has been equalled or exceeded thirteen times during the past nineteen years, while the minimum temperature, 32°, is the lowest, with the exception of two years, for the same period.

West Virginia: Helvetia, mean temperature, 56°.95 or 1°.54 below the average of the past six years.

RANGES OF TEMPERATURE AT SIGNAL SERVICE STATIONS.

Monthly ranges of temperature during the month of May varied from 22° to 68° at stations east of the Rocky mountains, and from 25° to 65° at stations on the Pacific coast. The smallest ranges are: Key West, 22°; Galveston and San Diego, 25°; Port Eads, Louisiana, and Punta Rassa, Florida, 26°; Brownsville, Texas, 28°; San Francisco, 29°; Indianola and New Orleans 30°; Pike's Peak, Colorado, and Portsmouth,

Table of Comparative Maximum Temperatures for the Month of May.

State or Territory.	Maximum for May, 1882, Signal Service.		Highest since Signal Service stations were opened—3 to 11 years.			Highest from any other source.			
	Station.	Temp.	Station.	Temp.	Year.	Place.	Temp.	Year.	Length of Record.
Alabama	Mobile	92	Montgomery	98	1875	Mount Vernon Arsenal	102		34 years.
Do			Mobile	98	1878				
Arizona	Yuma	104	Maricopa Wells	106	1878	Camp Verde	111		12 "
Do	Phoenix	102	Tucson	106	1881	Fort Mojave	110		11 "
Arkansas	Little Rock	87	Little Rock	91	1880	Washington, near	94		28 "
Do						Fort Smith	93		21 "
California	Visalia	101	Los Angeles	97	'79 & '80	Fort Miller	113		14 "
Do			Visalia	97	'78 & '79				
Do			Red Bluff	97	1878				
Colorado	West Las Animas	83	Denver	93	1874	Fort Lyon	99	1880	22 "
Connecticut	New Haven	76	New Haven	89	1880	New Haven	93		86 "
Do			New London	89	1881				
Dakota	Rapid City	89	Fort Sully	101	1874	Fort Abercrombie	102		19 "
Do	Yankton	88	Pemba	96	1874	Fort Randall	101		22 "
Delaware	Delaware Breakwater	76	Delaware Breakwater	89	1880	Fort Sully	101		16 "
Do						Dover	94	1880	7 "
Dist. of Columbia	Washington	88	Washington	96	1880	Fort Delaware	91		45 "
Florida	Key West	91	Jacksonville	98	'74 & '78	Washington	96		59 "
Do			Saint Marks	97	1874	Houston	103	'78 & '81	4 "
Do						Okahumpka	99	1879	4 "
Georgia	Savannah	91	Augusta	100	1878	Fort King	98		10 "
Do			Tybee Island	99	1878	Oglethorpe Barracks	97	1878	40 "
Do						Quitman	97	1876	4 "
Idaho	Lewiston	88	Lewiston	88	1879	Augusta Arsenal	96		61 "
Do			Boise City	88	1881	Fort Lapwai	101		18 "
Illinois	Cairo	83	Cairo	92	1874				
Do						Chicago	98		38 "
Indiana	Indianapolis	80	Indianapolis	89	'74 & '81	Mattoon	98	1876	2 "
Do						Logansport	98	1881	2 "
Indian Territory	Fort Gibson	88	Fort Sill	97	1880	Fevay	98		13 "
Do			Fort Gibson	94	'74 & '80	Fort Arbuckle	100		20 "
Do						Fort Gibson	99		47 "
Iowa	Des Moines	88	Dubuque	94	1874	Fort Sill	98	1875	9 "
Do			Des Moines	93	1880	Boonsboro	98	1880	4 "
Do						Nora Springs	98	1878	6 "
Kansas	Leavenworth	89	Dodge City	98	'79 & '80	Glenwood	98	1880	1 "
Do			Leavenworth	94	'74 & '75	Fort Hays	100	1879	12 "
Do						Fort Larned	99		18 "
Kentucky	Louisville	85	Louisville	93	1881	Fort Riley	99		23 "
Do						Newport Barracks	90		29 "
Do						Bowling Green	90	1880	3 "
Louisiana	Shreveport	93	Shreveport	101	1875	Chilesburg	90		4 "
Maine	Portland	72	Portland	94	1880	Baton Rouge	99		56 "
Maryland	Baltimore	83	Baltimore	93	1881	Brunswick	98		53 "
Do						Fort Washington	97		58 "
Massachusetts	Boston	81	Boston	80	1881	New Market	98	1877	3 "
Do						Somerset	97	1880	7 "
Michigan	Grand Haven	76	Marquette	95	1874	Williamstown	95		60 "
Do						Detroit	94		38 "
Minnesota	Saint Paul	77	Saint Paul	94	1874	Ontonagon	94		11 "
Mississippi	Vicksburg	90	Vicksburg	95	'74 & '77	Fort Ripley	101		16 "
Missouri	Saint Louis	89	Saint Louis	93	1874	Brookhaven	98	1875	5 "
Do						Corning	100	1875	7 "
Montana	Cartersville	91	Fort Keogh	98	1881	Saint Louis	97	1878	40 "
Nebraska	North Platte	87	North Platte	94	1880	Fort Shaw	98		13 "
Do						Fort McPherson	100	1879	12 "
Nevada	Winnemucca	86	Winnemucca	86	1881	Fort Calhoun	98		5 "
New Hampshire	Mount Washington	46	Mount Washington	62	'79 & '80	Camp Halleck	104		11 "
Do						Auburn	96	1881	5 "
New Jersey	Little Egg Harbor	83	Sandy Hook	89	1874	Grafton	96	1880	2 "
Do						New Lisbon	101	1880	1 "
New Mexico	La Mesilla	96	La Mesilla	101	'79 & '81	New Brunswick	98	1880	5 "
Do						Fort McBae	109		11 "
New York	Albany	79	New York City	94	1880	Fort Craig	108		25 "
Do			Oswego	94	1879	West Point	101	1880	65 "
North Carolina	Kitty Hawk	87	North Carolina	95	1878	Newberg	98		40 "
Do						Weldon	100	1880	7 "
Ohio	Cincinnati	83	Cincinnati	94	'74 & '75	Fort Johnson	92		47 "
Do						Cincinnati	96	'77 & '81	42 "
Oregon	Umatilla	96	Umatilla	92	1878	Marletta	94		53 "
Pennsylvania	Pittsburgh	82	Philadelphia	96	1880	Fort Dalles	98		15 "
Do			Pittsburgh	95	1881	Philadelphia	98	1880	120 "
Rhode Island	Newport	75	Newport	85	1881	Milton	100	1881	2 "
Do						Fort Adams	91	1880	40 "
South Carolina	Charleston	87	Charleston	94	1878	Providence	91		35 "
Do						Charleston	94		105 "
Tennessee	Memphis	90	Memphis	96	1879	Aiken	97	1881	6 "
Do						Humboldt	98		4 "
Texas	Eagle Pass	105	Eagle Pass	116	1879	Ashwood	96	1878	3 "
Do			Uvalde	113	1879	Ringgold Barracks	123	1879	32 "
Utah	Salt Lake City	83	Salt Lake City	91	1874	Camp Stockton	111		15 "
Do						Camp Douglas	91		18 "
Vermont	Burlington	91	Burlington	91	1880	Mount Carmel	96.4	1878	8 "
Do						Charlotte	98	1878	7 "
Virginia	Norfolk	89	Norfolk	98	1880	Lunenburg	88		16 "
Do						Acetlink	97	'80 & '81	6 "
Washington T'y.	Dayton and Pomeroy	86	Dayton	90	1880	Alexandria	96		12 "
West Virginia	Morgantown	79	Morgantown	91	1875	Fortress Monroe	95	1880	65 "
Do						Fort Walla Walla	99		14 "
Wisconsin	La Crosse	80	La Crosse	96	1874	Weston	100	1877	5 "
Wyoming	Cheyenne and Fort Washakie	77	Cheyenne	88	1874	Helvetia	90	1877	5 "
						Embarras	98		14 "
						Fort Laramie	98		27 "

North Carolina, 31°; Fredericksburg, Texas, and New Shoreham, Rhode Island, 33°; Hatteras, North Carolina, Delaware Breakwater, Delaware, and Pensacola, Florida, 34°; Thatcher's

Island, Massachusetts, and Macon, North Carolina, 35°. The largest are: Deer Lodge, Montana, 69°; Cartersville, Montana, 66°; Campo, California, 65; Missoula and Terry's Landing,

Montana, and Winnemucca, Nevada, 63°; Rapid City, Dakota, and Umatilla, Oregon, 62°; Red Bluff, California, and New Chicago, Montana, 59°; Grierson Springs, Texas, and Visalia, California, 58°; El Paso, Texas, Fort Buford, Dakota, and San Carlos, Arizona, 57°; Dayton, Washington Territory, Eagle Rock, Idaho, and Fort Stevenson, Dak., 56°; Saint Vincent, Minnesota, Fort Keogh, Montana, Couer D'Alene, Idaho, La Mesilla, New Mexico, and Sacramento, California, 55°. The greatest daily ranges varied in different districts, as follows: New England, from 18° at New Shoreham on the 9th, and 20° at Mount Washington on the 2d, to 32° at Boston on the 8th, and 34° at Springfield on the 4th; middle Atlantic states, from 21° at Cape May on the 3rd and 19th, and 23° at Delaware Breakwater on 9th to 34° at Atlantic City on the 9th, and 45° at Norfolk on the 20th, and Williamsport, Pennsylvania, on the 3rd and 30th; south Atlantic states, from 20° at Jacksonville, on the 2nd and 21st, to 27° at Charlotte on the 19th, and 28° at Wilmington on the 4th; Florida peninsula, from 14° at Key West on the 1st, to 25° at Cedar Keys on the 18th; east Gulf states, from 18° at New Orleans on the 24th, to 30° at Mobile and 31° at Montgomery on the 4th; west Gulf states, from 18° at Port Eads on the 3d, and 19° at Galveston on the 8th, to 33° at San Antonio on the 10th, and 36° at Fort Gibson, on the 1st; Rio Grande valley, from 23° at Brownsville on the 12th to 44° at Eagle Pass on the 10th and 47° at Uvalde on the 12th; Ohio valley and Tennessee, from 26° at Indianopolis on the 7th and 17th, and at Columbus on the 17th to 37° at Morgantown on the 3d; lower lake region, from 22° at Erie on the 3d and 31st; to 30° at Cleveland on the 3d; upper lake region, from 24° at Milwaukee on the 25th, to 35° at Alpena on the 3d, and 36° at Duluth on the 29th; extreme northwest from 34° at Saint Vincent on 14th and 28th, to 41° at Bismarck on the 2d; upper Mississippi valley, from 23° at Cairo on the 25th, and 24° at Springfield, Illinois, on 26th, to 32° at Saint Paul on 15th and 16th, and at Des Moines on 2d, and 16th; Missouri valley, from 26° at Springfield, Missouri, on the 17th, and at Leavenworth on the 15th, 16th, 17th, and 22d, to 41° at Fort Bennett, Dakota, on the 3d; northern slope, from 31° at Helena, Montana, on the 1st, 11th, and 24th, and at North Platte, Nebraska, on the 1st, to 62° at Rapid City, Dakota, and 63° at Terry's Landing, Montana, on 2d; Middle slope, from 18° at Pike's Peak on the 16th, to 36° at Fort Elliott, Texas, on the 1st, and 40° at West Las Animas, Colorado, on the 3d; southern slope, from 31° at Henrietta, Texas, on the 23d, to 43° at Fort McKavett, Texas, on the 11th, and 50° at El Paso, Texas, on the 12th; southern plateau, from 36° at Fort Grant, Arizona, on the 4th, to 50° at Tucson, 51° at Fort Apache, Arizona, and 52° at La Mesilla, New Mexico on the 11th; middle plateau, from 33° at Salt Lake City on the 1st, and 34° at Pioche, Nevada, on the 22d, to 42° at Winnemucca on the 10th, and 11th; northern plateau, 38° at Spokane Falls, on the 24th, and 39° at Boise City, on the 11th, to 49° at Missoula, Montana, on the 12th; north Pacific coast region, from 33° at Portland on the 23d, to 44° at Roseburg on the 21st; middle Pacific coast region, from 20° at San Francisco on the 9th and 20th, to 34° at Red Bluff on the 31st; south Pacific coast region, from 23° at San Diego on the 10th, to 54° at Campo on the 11th.

FROSTS.

In the various districts they were reported on the following dates:

New England: 1st to 8th, 11th, 15th to 18th, 24th, 26th, 30th.

Middle Atlantic states: 1st to 8th, 11th, 12th, 16th to 20th, 24th, 26th, 30th.

Tennessee: 1st, 16th, 17th, 23d.

Ohio valley: 1st to 4th, 6th, 15th to 18th, 23d, 24th, 26th, 29th.

Lower lake region: 1st, 2d, 3d, 5th to 8th, 10th, 15th to 18th, 23d, 24th, 27th, 28th, 30th.

Upper lake region: 1st to 7th, 14th to 18th, 22d to 25th, 27th, 28th, 29th, 31st.

Extreme northwest: 1st, 2d, 6th, 11th, 21st, 22d, 23d, 26th, 28th, 29th, 31st.

Upper Mississippi valley: 1st, 2d, 11th, 12th, 15th, 16th, 17th, 21st to 25th, 29th.

Missouri valley: 1st, 9th, 13th, 16th, 21st, 22d, 23d, 25th.

Northern slope: 8th to 24th, 31st.

Middle slope: 1st, 2d, 5th to 10th, 19th, 20th, 22d, 25th, 30th, 31st.

Northern plateau: 9th, 10th, 13th, 14th, 20th.

Middle plateau: 5th, 8th, 9th, 10th, 13th to 18th, 20th, 21st.

North Pacific coast region: 8th, 9th, 11th, 13th, 15th, 19th, 20th.

Middle Pacific coast region: 13th to 16th, 22d, 23d, 24th.

South Pacific coast region: 4th, 9th, 12th, 15th, 16th, 17th.

The occurrence of frosts have also been reported by the following stations not situated in the districts named above: Highlands, N. C., 1st, 23d; Lenoir, N. C., 1st; Augusta, Ga., 16th, 17th; Green Springs, Ala., 16th, 17th; Santa Fe, 7th, 9th, 10th, 22d, 28th.

Damaging frosts have been reported in the various states and territories as follows:

Illinois: Rockford, 23d, the frost nipped the fruit buds, but it is thought that the damage will be light. Anna, 16th, injuring early vegetables. Champaign, 16th, injuring fruit and vegetables. Springfield, 22d, the cold northwesterly winds of early morning seriously injured fruit and vegetables.

Iowa: Nora Springs, 22d and 23d, killing corn, potatoes, and other vegetables, also injuring the foliage of fruit and forest trees. Cresco, 22d, killing vegetation. Dubuque, 22d, considerable damage done by frost; cherries and plums ruined; apples injured; 23d, all advanced garden vegetables seriously injured. Des Moines, 22d, it is reported from surrounding country that the frost of last night has done much damage. At Ames, the frost is reported to have been the heaviest known at this season for many years; corn and potatoes have been seriously injured, and the foliage of many forest trees has been discolored from its effects. At Fort Dodge, the heavy frost is believed to have killed all the fruit; corn and potatoes were killed in the ground. At Marshalltown, small fruits are mostly ruined and other damage is feared.

Kansas: Atchison, garden vegetables are cut badly, but no further damage has been sustained. Clay Centre, garden vegetables were slightly injured, other crops suffered no injury; Emporia, tender vegetables on the bottom lands suffered some damage. The frost of the twenty-second is the first that has occurred at so late a date for many years. Holton, 22d, killing potatoes and all tender vegetation.

Minnesota: Minneapolis, 23d: the frost nipped the fruit buds and early garden truck, but did no further damage.

Missouri: Kansas City, 22d, reports state that small fruits have suffered greatly, and that in some districts the crop will be a failure. Rich Hill, 22d, some damage was done to vegetation on low bottoms; wheat and fruit were not injured.

Michigan: Port Huron, 24th, much damage reported to have been done to the fruit crop in this section.

Nevada: Carson City, 15th, nearly all fruit frozen.

New Jersey: Atco, 3d, doing much injury. Moorestown, 3d, very severe, killing vegetation.

North Carolina: Lenoir, 1st, frost injuring cotton. Weldon, 22d, the cold weather has killed cotton; farmers are plowing up the fields and replanting them.

Ohio: College Hill, 11th, peaches, pears, cherries, and quince destroyed. Toledo, 24th, much injury done in adjacent country by frosts; beans and peas were entirely destroyed and wheat was damaged to some extent.

Tennessee: Memphis, 17th, strawberry crop injured. Chattanooga, 19th, the effects of the recent cold weather upon cotton has been very injurious. Many farmers have plowed up their fields and replanted them with corn.

Table of Maximum and Minimum Temperatures for May, 1882.

State or Territory.	Signal Service.			U. S. Army Post Surgeons or Voluntary Observers.		
	Station.	Max.	Min.	Station.	Max.	Min.
Alabama.....	Mobile.....	92	0	Calera.....	97	36
Do.....	Montgomery.....	48				
Arizona.....	Yuma.....	104				
Do.....	Phoenix.....	102				
Do.....	Fort Apache.....	82				
Arkansas.....	Little Rock.....	87	49	Madison.....	92	28
Do.....				Brinkley and De- vall's Bluff.....	92	
California.....	Visalia.....	101		Borden.....	111	
Do.....	Campo.....	30		Cisco and Emi- grant Gap.....	24	
Colorado.....	West Las Animas.....	85		Fort Lyon.....	88	
Do.....	Denver.....	34		Fort Lewis.....	22	
Do.....	Pike's Peak.....	35	4			
Connecticut.....	New Haven.....	76	31	Southington.....	85	
Dakota.....	Rapid City.....	89		Fort Randall.....	91	
Do.....	Yankton.....	58		Fort Yates.....	18	
Do.....	Fort Buford.....	22				
Delaware.....	Del. Breakwater.....	76	42			
District of Columbia.....	Washington.....	86	37	Ft. Brook Tampa.....	95	
Florida.....	Key West.....	91		Live Oak.....	46	
Do.....	Pensacola.....	52		Way Cross.....	98	
Georgia.....	Savannah.....	91		Madison.....	31	
Do.....	Atlanta.....	45				
Idaho.....	Lewiston.....	88		Charleston.....	87	
Do.....	Eagle Rock.....	24		Riley.....	27	
Illinois.....	Calro.....	83		Logansport.....	90	
Do.....	Champaign.....	33				
Indiana.....	Indianapolis.....	80	37	Guttenburg and Nora Springs.....	24	
Indian Territory.....	*Fort Gibson.....	83	41			
Iowa.....	Des Moines.....	88		Clay Centre.....	98	
Do.....	Dubuque.....	31		Wellington.....	34	
Kansas.....	Leavenworth.....	89		Bowling Green.....	84	
Do.....	Dodge City.....	39		Cheneyville.....	108	
Kentucky.....	Louisville.....	85	44	Franklin.....	34	
Louisiana.....	Shreveport.....	93	49	Fort Preble.....	77	
Do.....				Gardiner.....	28	
Maine.....	Portland.....	72		Emmitsburg.....	87	
Do.....	Eastport.....	29		Woodstock.....	29	
Maryland.....	Baltimore.....	88	38	Westborough.....	83	
Do.....				Heath.....	26	
Massachusetts.....	Boston.....	81	31	Hastings.....	83	
Do.....				Minneapolis.....	79	
Michigan.....	Grand Haven.....	76		Waynesborough.....	100	
Do.....	Escanaba.....	20		Lake.....	41	
Minnesota.....	St. Paul.....	77		Jefferson Barracks.....	34	
Do.....	St. Vincent.....	22				
Mississippi.....	Vicksburg.....	80		De Soto.....	89	
Do.....	Starkville.....	50		Humboldt.....	92	
Missouri.....	Saint Louis.....	89		Contoocookville.....	80	
Do.....	Springfield.....	41		Grafton and New Market.....	30	
Montana.....	Cartersville.....	91		Readington.....	88	
Do.....	Deer Lodge.....	21		Atco.....	28	
Nebraska.....	North Platte.....	87	33	Deming.....	97	
Do.....				Fort Union.....	23	
Nevada.....	Winnemucca.....	86	23	Troy and West Point.....	88	
New Hampshire.....	Mt. Washington.....	46	4	Johnstown.....	24	
Do.....				Wadesboro.....	94	
New Jersey.....	Little Egg Harbor.....	83		Goldsboro.....	34	
Do.....	Atlantic City and Cape May.....	34		North Lewisburg and New Athens.....	30	
New Mexico.....	La Mesilla.....	95				
Do.....	Santa Fe.....	32		Fallington.....	88	
New York.....	Albany.....	79		Dyberry.....	20	
Do.....						
Do.....	Rochester.....	29		Fort Adams.....	70	
North Carolina.....	Kittyhawk.....	87		Allendale, Che- raw, Hardwell, and King's Tree.....	94	
Do.....	Smithville.....	43		Florence.....	82	
Ohio.....	Cincinnati.....	83		Milan and Withe.....	92	
Do.....				Erin.....	36	
Do.....	Cleveland.....	31				
Oregon.....	Umatilla.....	96	34	Coalville.....	77	
Do.....	Roseburg.....	34		Woodstock.....	51	
Pennsylvania.....	Pittsburg.....	82		Snowville.....	88	
Do.....				Acotink.....	88	
Do.....	Erie and Williams- port.....	32		Wytheville.....	32	
Rhode Island.....	Newport.....	75				
Do.....	Narragansett Pier.....	34				
South Carolina.....	Charleston.....	87	62			
Do.....						
Do.....	Memphis.....	90				
Tennessee.....	Knoxville.....	41				
Do.....	Eagle Pass.....	105				
Texas.....	Fort Elliot.....	81				
Do.....	Salt Lake City.....	83	35			
Utah.....						
Vermont.....	Norfolk.....	89				
Virginia.....	Cape Henry.....					
Do.....	Chincoteague and Lynchburg.....	42				
Do.....	Dayton.....	89	30			
Washington Ter.....	Pomeroy.....	86				
Do.....	Olympia.....	30				
West Virginia.....	Morgantown.....	79	31	Helvetia.....	84	
Wisconsin.....	La Crosse.....	80		Beloit.....	81	
Do.....	Milwaukee.....	51		Embarrass.....	90	
Wyoming.....	Cheyenne.....	77	23	Fort Bridger.....	19	
Do.....	Fort Washakie.....	77				

* Observations from 1st to 12th

ICE.

The formation of ice has been reported in the various states and territories as follows:

Connecticut: Southington, 6th, 7th, 16th.

Dakota: Alexandria, 21st, 22d.

Idaho: Eagle Rock, 17th.

Illinois: Rockford, 15th; Charleston, 2d.

Indiana: Logansport, 2d; Wabash, 15th, 16th; Fort Wayne, 1st, 23d, 24th.

Iowa: Davenport, Clinton, Muscatine and Nora Springs, 2d; Cresco, 22d, 23d; Fort Madison, 23d; Guttenburg, 22d, 30th; Independence, 21st, 22d; Dubuque, 23d.

Michigan: Detroit and Grand Haven, 2d.

Minnesota: Saint Paul, 2d, 23d.

Nebraska: Genoa, 1st, 21st.

Nevada: Carson City, 5th, 8th, 9th, 10th, 13th, 14th, 15th, 17th, 20th, 21st.

New York: Friendship, 16th, 18th, 26th. Waterburg, 3d, 6th, 7th, 16th, 18th, 19th. Albany, 3d.

Ohio: Bellefontaine, 1st, 2d, 3d. Cleveland, 3d. Jacksonburg, 3rd, 16th. North Lewisburg, 3d. Westerville, 1st, 3d. Toledo and Cleveland, 3d.

Pennsylvania: Fallsington, 3d.

Vermont: Charlotte, 16th. Strafford, 5th, 6th, 7th, 16th. Woodstock, 3d, 6th, 16th, 26th.

Wisconsin: Embarrass, 2d, 15th. La Crosse, 16th, 23d.

Wyoming: Fort Washakie, 19th.

PRECIPITATION.

The distribution of rainfall over the United States and Canada, as determined from observations taken at over six hundred stations, is exhibited on chart iii. The table on the left-hand corner of this chart, shows the average monthly rainfall determined from the records of Signal Service stations, in the several districts, and the excess or deficiency as compared with the average of many years. Large excesses occurred in the middle Atlantic and west Gulf states, in the Ohio valley, Tennessee, the lower lake region, and Rio Grande valley; the departures ranging from 2.00 inches in the Rio Grande valley, to 4.57 inches in the Ohio valley. On the summit of Mount Washington, an excess of 2.77 inches, and on the summit of Pike's Peak, an excess of 9.08 inches occurred. The largest deficiency occurred in the south Atlantic states, where it amounted to 1.28 inches. In the northern plateau district, a deficiency of 1.12 inches, and in the north Pacific coast region a deficiency of 0.87 inch occurred, and a slight deficiency is reported from the south Pacific coast region.

DEVIATIONS FROM AVERAGE PRECIPITATION.

Under this heading departures exhibited by the reports from the regular Signal Service stations, are shown in the table of comparative monthly rainfalls (as published in the lower left-hand corner of chart iii.) The following items of importance in connection with this subject are reported by voluntary observers.

Illinois: Riley, monthly rainfall 3.59 inches, or 0.27 inch more than the average of the past twenty-one years. The total precipitation for the spring of 1882, is 2.83 inches more than the spring average of the past twenty-one years, and has been exceeded in but two years during that period; viz.: in 1861 and 1868.

Indiana: Vevay, monthly rainfall 8.65, or 5.12 inches more than the average of the past seventeen years. Laconia, monthly rainfall 7.86 inches, which is the largest May rainfall that has occurred since 1868, when 8.08 inches fell.

Kansas: Wellington, monthly rainfall 7.20, or 2.20 inches more than the average of the past three years. During that period, the largest May rainfall, 9.37 inches, occurred in 1881; the smallest, 1.16 inches occurred in 1879. Total rainfall for the five months ending May 31st, is 13.47; for the same period in 1881, 14.52; in 1880, 6.78 and in 1879, 6.56 inches. Lawrence, monthly rainfall 3.53 inches, or 0.57 inch below the average of the past four-